# Quick Use and Setup Guide



## Let's make things better.



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WARNING: TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS UNIT TO RAIN OR EXCES-SIVE MOISTURE.

## HOOKING UP YOUR PROJECTION TV (BASIC TV CONNECTIONS)

## **BEST VIEWING**

The major benefit of this projection L television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the optimum spot for

NOTE: Be sure to allow a free flow of air to and from the perforated back cover of the set.

To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot—for example, in direct sunlight or near a heating appliance.

Magnetic fields, such as those of external speakers, may cause the picture to distort if the speakers are placed too close to the television. Move the magnetic field source away from the TV until there is no picture distortion.

## ANTENNA/CABLE TV HOOKUP

The TV signal coming into your The IV signal common a Cable TV home may be from a Cable TV company or a combination UHF/VHF antenna. In either case, the basic connection to the TV is very easy.

A Cable TV signal may use a cable box or a direct connection and can receive up to 125 channels.

A UHF/VHF antenna can receive normal broadcast channels 2–13 for VHF and 14-69 for UHF band sig-

Unless your TV is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for best performance. But if you are located in an area with an exceptionally good signal that is free from interference and multiple image "ghosts," an indoor antenna may be sufficient.

#### (BEGIN)

Cable/Connector

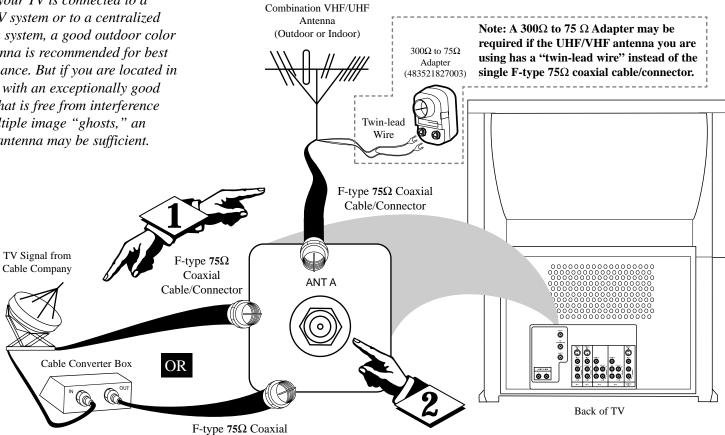
Connect the coaxial cable/connector to the ANT(enna) A input on the back of the TV.

If you're using a cable converter box, connect the OUT(put) plug from the converter to the ANT(enna) A input on the back of the TV.

## **2** If the TV signal is from a $75\Omega$ F-type coaxial cable/connector,

then you're ready to connect it to the antenna input on the back of the TV. If you're using a cable signal with a convertor box, first connect the cable TV signal to the cable signal IN(put) plug on the converter box. Then connect from the OUT(put) on the converter box to the ANT(enna) input on the back of the TV.





#### CHECK IT OUT

- ✓ To set the TV to select only the channel numbers in your area see how to "Program" or "Add" channels in memory on page 5 (Auto Program section).
- ✓ If you intend to use separate UHF and VHF antennas, you will need an optional combiner to connect to the TV. To order any optional accessory contact your dealer or call the toll-free accessory ordering number (1-800-851-8885).
- ✓ See page 8 for more information on the Rear Panel jacks.

## HOOKING UP YOUR TV (BASIC TV CONNECTIONS)

## BASIC VCR HOOKUP

Follow the steps to the right to connect a basic antenna or cable TV signal to a VCR, and then the VCR to the TV. Refer to the owner's manuals for your VCR and cable converter box for further information on hookups.

#### -(BEGIN)

Connect your antenna or cable TV signal to a two-way signal splitter

Connect one end of coaxial cable to each of the output plugs on the signal splitter.

Connect one of the signal splitter outputs to the ANT(enna) IN(put) on the VCR.

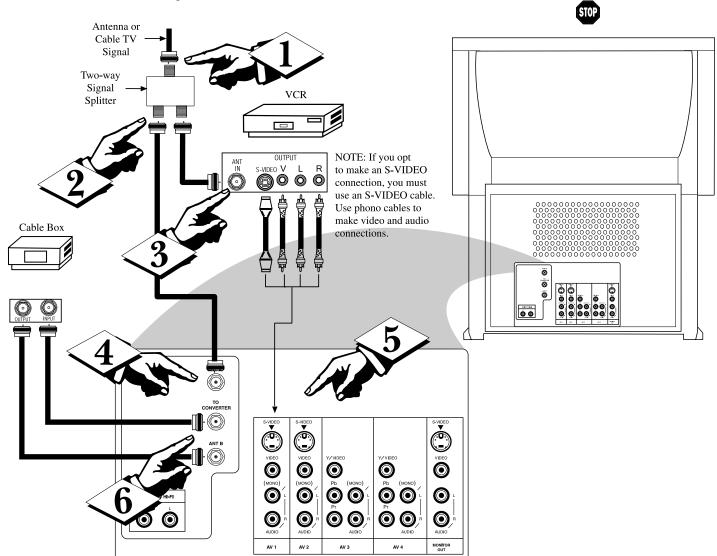
Connect the remaining signal splitter output to the ANT(enna) A input on the back of the TV.

Connect either the S-VIDEO or V(ideo) output jack and the L(eft) and R(ight) audio output jacks on the back of the VCR to the matching AV 1 jacks on the back of the TV.

Connect the INPUT jack on the back of the cable box to the TO CONVERTER jack on the back of the TV. Then connect the OUTPUT jack on the back of the cable box to the ANT(enna) B input on the back of the TV.

## CHECK IT OUT

✔ Your TV remote control allows you to switch between two separate 75-ohm antenna inputs, ANT(enna) A and ANT(enna) B. You can display the ANT(enna) A input as a main picture or subpicture (Picturein-Picture). You can display ANT(enna) B only as a main picture. (ANT[enna] B cannot be displayed as a subpicture.) The antenna output labeled "TO CONVERTER" allows the ANT(enna) A connection to pass directly to a different source such as a cable box, only when ANT(enna) B is displayed as a main picture.



TV's Rear Panel

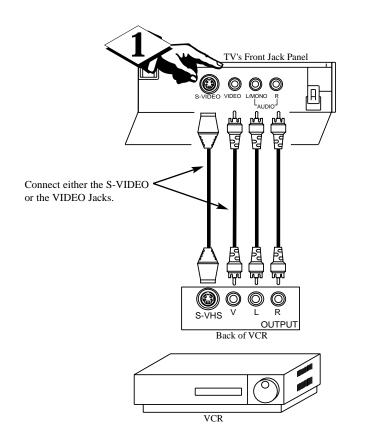
## FRONT PANEL JACKS

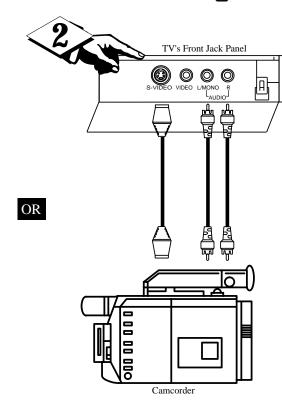
The Front Panel jacks offer you the convenience of easy connection to a camcorder or VCR.

## (BEGIN)

Connect the S-VHS or Video
OUTPUT jack and the audio L(eft)
and R(ight) OUTPUT jacks on the
back of the VCR to the TV's Front
Panel jacks.

Connect the S-VHS and audio L(eft) and R(ight) OUTPUT jacks on the camcorder to the TV's Front Panel jacks.





## CHECK IT OUT

- Be sure to completely insert cord plugs when connecting to the Front Panel jacks. If you don't, the playedback picture may be abnormal.
- ✓ If you have an S-VHS VCR, use the S-INPUT cable in place of the standard video cable.
- If you have a mono VCR, insert the audio cable into the left audio jack of your TV.

## PERFORMING BASIC TV OPERATIONS

## **TELEVISION**

In this section, learn how to use the TV buttons for basic operation of the TV. (See page 4 for information on how to adjust or set TV controls through the on-screen menu using the buttons on the front of the TV, if you don't want to use the remote.)

#### (BEGIN)

Press the POWER button to turn the TV on.

After having connected a broadcast signal source to the TV, press the INPUT/EXIT button to select a source. The source options are Tuner A, Tuner B, A/V: 1, A/V: 2, Front, A/V: 3, and A/V: 4. For this example, choose the source to which you connected the broadcast signal (Tuner A or Tuner B).

Press the CH(annel) selector buttons until the number of the channel you desire appears in the right corner of the TV screen.

buttons to attain your desired sound level. The volume level will be displayed on the TV screen.

## CHECK IT OUT

appear to be turned off if no video input is present when A/V:1, A/V: 2, FRNT, A/V: 3, or A/V: 4 are selected. Check the Power Light to make sure the TV is turned off when not in use. ✓ Your remote does not have an INPUT button. Use the SOURCE button to choose among signal sources. You can also use the

AV 1, AV 2, AV 3,

and AV 4 buttons to access signal sources.

✓ Your TV will

Remote Control Sensor—point your remote at this area when selecting channels, adjusting volume, and sending other commands with the remote.

ImageMax<sup>TM</sup> Sensor—this will make automatic picture adjustments based on the amount of light in the room to give the best picture.

Power Light—you will see a red light when the TV is turned on.

POWER button—With the TV off, press and hold this button for five seconds to see an autodemonstration of the on-screen displays with HELP text.

Press the indention on the Front Panel to access the Front Panel Jacks.

Front Panel Jacks ("FRNT" inputs)—Use these audio/video jacks for a quick hookup from a camcorder or VCR to instantly view your favorite show or new recording. Press the INPUT/EXIT button on the TV until "FRNT" appears in the top right corner of the TV screen. If you have mono sound, insert the audio cable into the left audio jack.

## REMOTE

Offering direct access to the on-screen menu, this remote controls all features and functions of your TV. It also controls virtually all infrared VCRs, laserdisc/DVD players, and satellite receivers, as well as on/off and channel up/down on most cable converter/decoders (see pages 31–36 of the Directions for Use manual for setup information).

**SOURCE Button**—Press to choose from among the TV's signal sources: Tuner A, Tuner B, A/V: 1, A/V: 2, FRNT (Front), A/V: 3, or A/V: 4.

Mode Buttons—This remote can be set up to operate a VCR, DVD, laserdisc, cable box, or satellite receiver. Press TV to use the remote with the TV, DVD for DVD and laserdisc, VCR for VCR, and ACC(essory) for a cable box or satellite receiver. (See the *Directions for Use* manual.) HELP Button—Press when a menu is on screen to view HELP text. The text gives a description of the displayed menu. The HELP text will be shown every time a MENU is displayed, until you press the HELP button again. FORMAT Button—Press to quickly change the aspect ratio of the viewable video. Choose from 4:3, Zoom, 16:9,

and Theater.

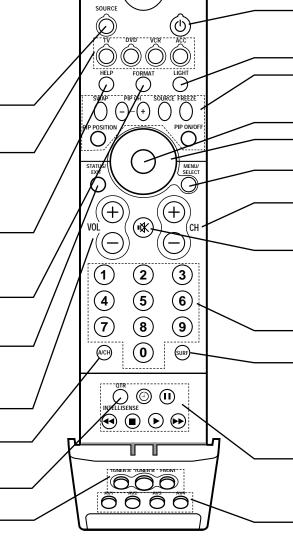
STATUS/EXIT Button—Press to display the time (after you have set it) and status of sound (stereo or mono), signal source, and screen format. Also press to clear the TV

**VOL(ume)** +, - **Buttons**—Press + or – until you obtain the volume level you want.

screen after setting or adjusting controls.

**A/CH** (Alternate Channel) Button—Press to choose between the last two channels viewed. (This is good for switching between two sporting events, for example.) **INTELLISENSE Button**—Press to automatically adjust picture convergence using Auto IntelliSense Focus.

**TUNER A, TUNER B, and FRONT Buttons**—Press to access either of the two tuners in the TV's Rear Panel or the audio/video jacks in the TV's Front Panel.



POWER Button—Press to turn the TV on or off. With the TV off, press and hold this button for five seconds to see an auto-demonstration of the on-screen displays with HELP text. LIGHT Button—Press to back-light the remote control. PIP Buttons—Press to perform Picture-in-Picture feature functions. See the section on Picture-in-Picture in the

Directions for Use manual for details.

OK Button—Press to make selections in the on-screen menu.

CURSOR Buttons—Press LEFT, RIGHT, UP, or DOWN to move through, select, and adjust on-screen menu options.

MENU/SELECT Button—Press to access the TV's on

move through, select, and adjust on-screen menu options. **MENU/SELECT Button**—Press to access the TV's on-screen menu.

- **CH(annel)** +, - **Buttons**—Press to cycle through all stored channels that have been placed in TV memory after the "Auto Programming" function of the TV has been completed.

MUTE Button—Press to reduce the sound to one-half the normal volume (Soft Mute) (good to use when answering the telephone). Press the MUTE button again to turn the sound off completely. Press the button once more to restore the sound, or press the VOL(ume) + button.

 NUMBER Buttons—Press to directly access any numbered channel.

- SURF Button—Press to access the Favorite Channel screen. Favorite Channel simplifies surfing (going from channel to channel). It allows you to store up to 36 favorite stations in the Surf<sup>™</sup> memory. Favorite Channel has 6 categories with 6 channels per category. Add or delete channels from the onscreen list

**VCR Buttons**—Press the VCR buttons to activate certain VCR commands when the remote is in the VCR mode. The buttons are for PLAY, STOP, REWIND, FAST FORWARD, PAUSE, RECORD, AND TIMER features.

**AV1, AV2, AV3, AV4 Buttons**—Press to access the four audio/video input options on the TV's Rear Panel.

## REMOTE BATTERIES

Battery Usage CAUTION—To prevent battery leakage which may result in bodily injury or damage to the unit:

- Install ALL batteries correctly, + and as marked on the unit.
- Do not mix batteries: (OLD and NEW or CARBON and ALKALINE, etc.)
- Remove batteries when the unit is not used for a long time.

## (BEGIN)

Remove the battery compartment lid on the back of the remote.

Place the batteries (2-AA) in the remote. Be sure the (+) and (-) ends of the batteries line up correctly (inside of case is marked).

Reattach the battery lid.

STOP



## USING THE ON-SCREEN MENU

## MENU

This section explains how to make selections or adjustments within the onscreen menu. The menu is simply a list of your TV's features or controls. Use the CURSOR buttons on your remote control or the CH(annel) selector and VOL(ume) buttons on the TV to move among the menu options. As necessary, on-screen messages will provide you with information to guide you. Also, with the on-screen menu displayed, you can press the HELP button on the remote control to receive more onscreen assistance.

(BEGIN)

Press the
MENU/SELECT button on the
remote to display the On-screen
Menu. Or press the

MENU/SELECT button on the TV.

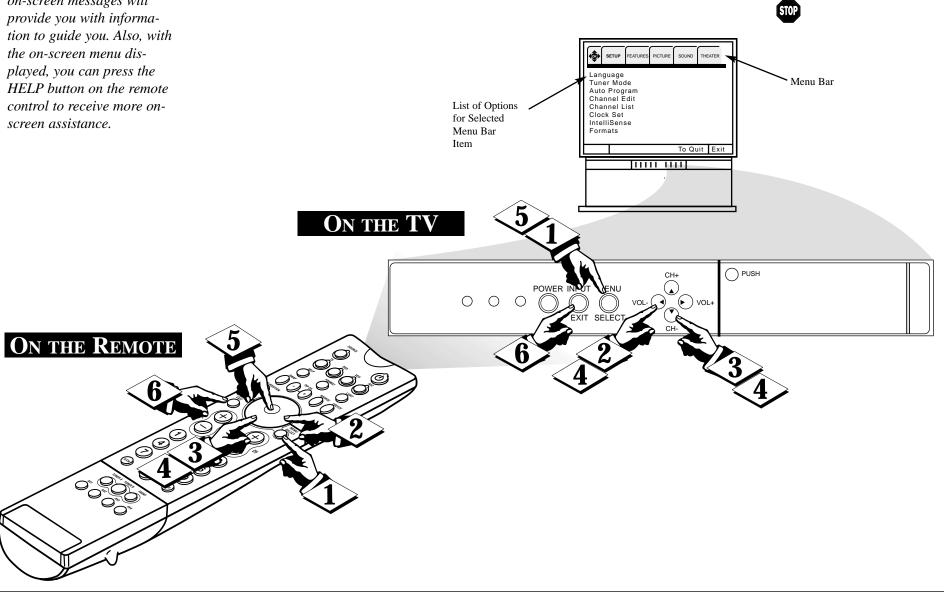
To choose an item from the Menu Bar, press the CUR-SOR RIGHT or LEFT button. Or press the VOL(ume) level buttons on the TV.

To highlight a feature within the menu, press the CURSOR DOWN or UP button on the remote. Or press the CH(annel) selector buttons on the TV.

To move through the list of options and their setting or adjustment areas, press the CURSOR DOWN, UP, RIGHT, or LEFT buttons. Or press the CH(annel) selector or VOL(ume) buttons on the TV.

To make selections, press the OK button on the remote or the MENU/SELECT button on the TV. To adjust Picture or Sound settings, press the CURSOR RIGHT or LEFT buttons on the remote. Or press the VOL(ume) –, + buttons

To remove the on-screen menu, press the STATUS/EXIT button on the remote. Or press the INPUT/EXIT button on the TV.



## USING THE SETUP CONTROLS

## LANGUAGE

The Language control will allow you to select any of three languages for all on-screen displays.

## (BEGIN)

the on-screen menu.

Press the MENU/SELECT
button on the remote control to show

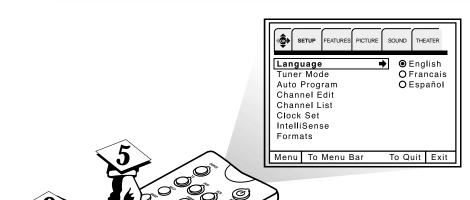
Press the CURSOR DOWN button to highlight Language.

Press the CURSOR RIGHT button to enter the Language options

Press the CURSOR DOWN or UP button to highlight the Language of your choice.

Press the OK button to select the language.

To return to the list of Setup options, press the CURSOR LEFT button. To return to the Menu Bar, press the MENU/SELECT button. To quit the on-screen menu, press the STATUS/EXIT button.





## USING THE SETUP CONTROLS

## TUNER MODE

 $m{B}^{ ext{y}}$  choosing a Tuner Mode, you are telling the TV the type of broadcast signal you have connected. Select Antenna if you are using an indoor or outdoor antenna. Choose Cable 1 or Cable 2 if you have cable TV.

Press the MENU/SELECT button on

the remote control to show the on-screen menu.

2 Press the CURSOR **DOWN button** twice until Tuner Mode is highlighted.

# Press the CURSOR

RIGHT button to move to the Tuner Mode options area. Press the CURSOR DOWN or UP button until you have highlighted the correct option.

4 Press the OK button to

## **CHECK IT OUT** To return to the list of

Setup options, press the CUR-

SOR LEFT button. To return to

the Menu Bar, press the

MENU/SELECT button. To

the STATUS/EXIT button.

Language

Auto Program

Channel Edit Channel List Clock Set

IntelliSense

Formats

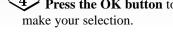
quit the on-screen menu, press

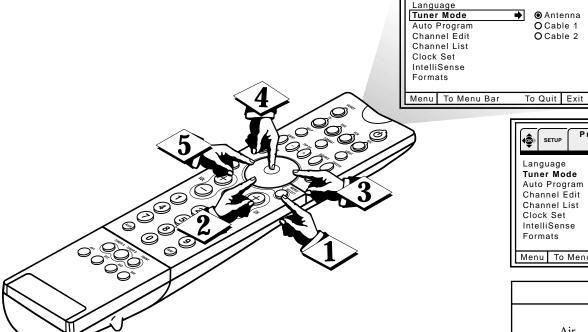
Press OK to set

O Cable 1

To Quit Exit

- The reception channels for the Antenna and Cable signal sources are shown below.
- ✓ Refer to your cable or TV guide for channel identification standards.
- If certain cable channels are poor or not possible in Cable 1 mode, set Tuner Mode to Cable 2.







Reception Band		
	Cable 1 or Cable 2	
Air	Cable Channel	Indicated on
(Antenna)		the screen
	VHF 2~13	2 ~ 13
	Midband A~1	14 ~ 22
VHF 2 ~ 13ch	A-5 ~ A-1	95 ~ 99
UHF 14 ~ 69ch	Super band J~W	23 ~ 36
	Hyperband	37 ~ 64
	$W + 1 \sim W + 28$	
	Ultraband	65 ~ 125
	$W + 29 \sim W + 84$	

## AUTO PROGRAM

*Tse this control to automatically* store active TV channels in the TV's memory. This will allow you to skip unused channels when using the CH(annel) +, -buttons on your remote.

## (BEGIN)

Press the

MENU/SELECT button on the remote control to show the on-screen menu.

2 Press the CURSOR **DOWN button** repeatedly until Auto Program is highlighted.

#### Press the CURSOR RIGHT button to highlight Search.

Press the OK button to start searching for channels and programming the TV's memory.

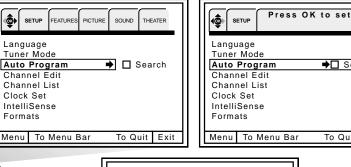
To return to the list of Setup options, press the CURSOR LEFT button. To return to the Menu Bar, press the MENU/SELECT button. To quit the on-screen menu, press the STATUS/EXIT but-

To Quit Exit

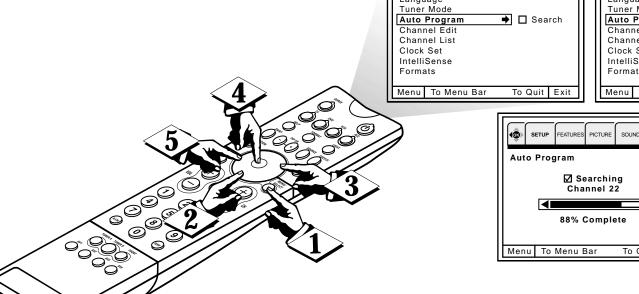
ton.

## **CHECK IT OUT**

- ✓ If you press the EXIT button while the Auto Program function is working, programming will stop.
- ✓ If you connect two antennas, switch antenna inputs with the INPUT button and repeat Auto Program for the second antenna input.
- ✔ Remember to select the correct Tuner Mode before using Auto Program (see the Tuner Mode section).
- ✓ See Channel Edit to learn how to add or delete channels.







## USING THE SETUP CONTROLS

## CHANNEL EDIT

Select the correct Tuner Mode and run Auto Program to automatically store active TV channels (see the sections on those controls in this publication). Then use Channel Edit to add or delete channels from the TV's memory.

#### BEGIN.

# Press the MENU/SELECT button on the remote control to show

the on-screen menu.

Press the CURSOR

Press the CURSOR DOWN button repeatedly until Channel Edit is highlighted.

Press the CURSOR RIGHT button to enter the Add/Delete area.

# Press the CURSOR DOWN or UP button to highlight Add or Delete.

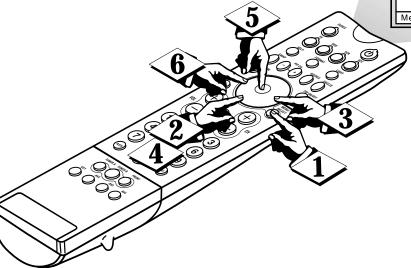
To Add or Delete the current channel, press the OK button. If you want to Add or Delete a different channel, press the CH(annel) + or – buttons to select the desired channel.

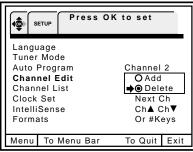
# To return to the list of Setup options, press the CURSOR LEFT button. To return to the Menu Bar, press the MENU/SELECT button. To quit the on-screen menu, press the STATUS/EXIT but-

STOP









ton.

## CHANNEL LIST

Channel List allows you to review labeled channels (Id). It also shows you which channels have been added to the TV's memory and which ones are protected by AutoLock.™ See the section on Channel Edit in this publication. Learn more about Channel List and AutoLock in the Directions for Use manual that came with your TV.

## (BEGIN)

Press the MENU/SELECT button on the remote control to show the on-screen menu.

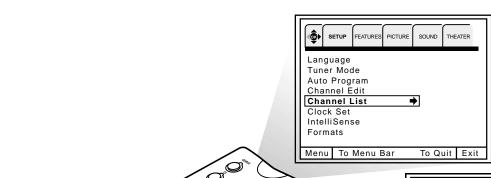
Press the CURSOR DOWN button repeatedly until Channel List is highlighted.

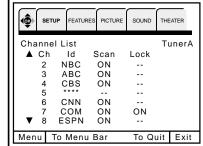
## Press the CURSOR

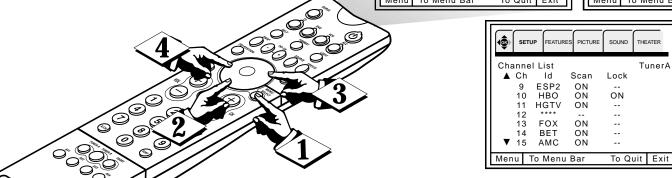
RIGHT button to view the Channel List. When in the Channel list, pressing the CURSOR DOWN or UP button will allow you to view the next eight channels.

To return to the list of Setup options, press the CURSOR LEFT button. To return to the Menu Bar, press the MENU/SELECT button. To quit the on-screen menu, press the STATUS/EXIT button.









## Using the Setup Controls

## **CLOCK SET**

**V**ou must set the time on the TV's L clock before you can use the 4 Event Program or Sleep Timer (see the Directions for Use manual for details on those features).

#### (BEGIN)

Press the MENU/SELECT button on the remote control to show the On-screen Menu.

2 Press the CURSOR DOWN button repeatedly until Clock Set is highlighted.

## **Press the CURSOR RIGHT**

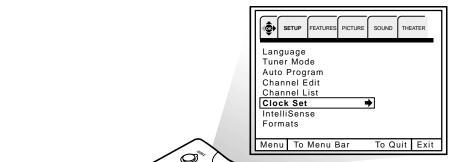
button to enter the Clock Set area.

Press the CURSOR DOWN or UP button to select digits for the hour. Press the CURSOR RIGHT button to move to the input area for the minutes. Press the CURSOR UP or DOWN to choose the digits for the minutes. Choose Am or Pm, the month, day, and year in the same manner.

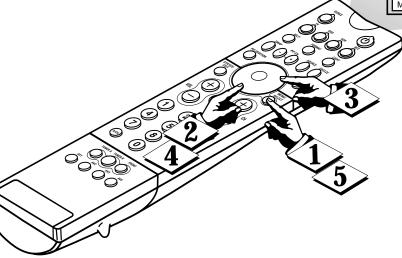
## After you have finished inputting the time, press the MENU/SELECT button to return to the Menu Bar. Or press the STA-

TUS/EXIT button to quit the onscreen menu.











## IntelliSense

You can automatically adjust the TV's picture convergence using Auto IntelliSense Focus. Your projection TV has three color projection tubes: one for red, one for green, and one for blue. When mixed in the proper proportion, the output of these three color tubes can produce any color. However, the beams of light coming from the tubes must be precisely aligned over each other so that the colors can be mixed. The alignment of these picture beams is called "convergence."

Over a period of time, the picture tubes can drift out of alignment because of normal bumps and vibrations or moving the TV. If you move your TV, or if, after a time, you notice color rings or halos around objects, use Auto IntelliSense Focus to adjust the convergence. This is how Auto IntelliSense Focus works: After reviewing a special test pattern, optical sensors send position information to a controller, which then corrects the picture. Auto IntelliSense Focus responds to the natural and man-made magnetic field conditions where the projection TV is located, so you always enjoy the best possible picture.

## (BEGIN)

Press the INTEL-**LISENSE button** on your remote control to begin adjusting the TV's convergence. The process takes about 15 seconds.

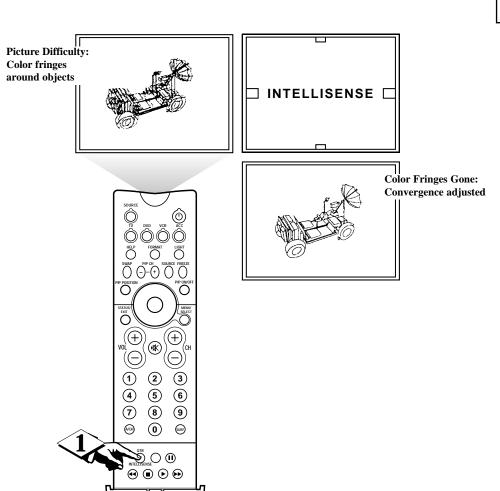
**NOTE:** During the adjustment process, do not press the INTELLISENSE button again and do not move the TV.



## **CHECK IT OUT**

✓ After Auto IntelliSense Focus does its work, the picture will be at its best.

✓ You can also access Auto IntelliSense Focus through the Setup Menu.



000 0000

## USING THE SETUP CONTROLS

## **FORMATS**

The Formats control is very useful **I** when setting up reception for High Definition, Standard Definition, and NTSC signals. The Comp Color Type function allows you to automatically change tint and color coordinate for DTV programs. Use the HDTV (High Definition Television) setting for a High *Vision Signal (Y-PbPr) from an HDTV* set-top box. Use the SDTV/DVD setting for Standard Definition Television or Digital Video Disc (Y-CbCr) such as a digital video disc player.

#### (BEGIN)

## Press the

MENU/SELECT button on the remote control to show the on-screen menu.

2 Press the CURSOR **DOWN button** repeatedly until Formats is highlighted.

## Press the CURSOR

RIGHT button to enter the Formats selection area.

4 Press the CURSOR **DOWN or UP button** to highlight a screen format you want to select for the TV picture.

## Press the OK button to make your selection. Repeat steps 4 and 5 to set

V. Position/Comp Color Type and Video Display.

6 To return to the list of Setup options, press the CURSOR LEFT button. To return to the Menu Bar, press the MENU/SELECT button. To quit the on-screen menu, press the STATUS/EXIT button.



✓ You must be tuned to A/V: 3 or A/V: 4 and have an accessory device hooked up to the Y-PbPr input jacks to access all of the Formats Menu options.

**CHECK IT OUT** 

✓ If Comp Color

Type is set improp-

erly (does not match

the actual input sig-

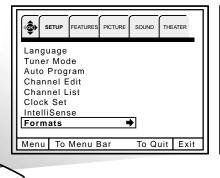
nal), the color and

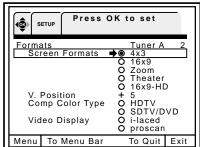
tint of the main pic-

ture will be abnor-

mal.

✓ All settings will affect only the component input you are currently viewing. If you are using both sets of component input jacks, be sure to set Formats for both inputs (set A/V: 3 and A/V: 4).





## LEARNING MORE ABOUT THE REAR PANEL JACKS

## JACK DESCRIPTIONS

**V**our TV's Rear Panel jacks allow the connection ■ of a variety of accessory devices ("components"). This section explains how you may use the jacks.

## **Component: Y-PbPr Inputs**

AV 3 and AV 4 provide Y-PbPr jacks for connecting equipment with Component Video capability. Devices such as DVD players or set-top boxes can be connected to these jacks. You may use standard video signal for AV 3 and AV 4.

## NOTES:

- · Your component inputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's Pb input and the components R-Y output to the TV's Pr input.
- Your component outputs may be labeled Y-CbCr. In this case, connect the component output to the TV's Pb input and the component Cr output to the TV's Pr input.
- It may be necessary to adjust Tint to obtain optimum picture quality when using the Y-PbPr inputs.
- To ensure no copyright infringement, the MONITOR OUT output will be abnormal when using the Y-PbPr jacks.
- When using the Y-PbPr jacks, the TV will automatically change to Split PIP mode. When you have Picture-in-Picture on and are viewing a Y-PbPr input, only Split mode is possible.
- AV 3 and AV 4 (Y/VIDEO) can be used for standard video input.

## Antenna Input/Output

The remote control allows you to switch between two separate 75-ohm RF antenna inputs, ANT A and ANT B. The ANT A input can be displayed as a main picture or subpicture. ANT B can be displayed only as a main picture. (ANT B cannot be displayed as a subpicture.) The antenna output labeled "TO CONVERTER" allows the ANT A connection to pass directly to a different source such as a cable box only when ANT B is displayed as the main picture.

## AUDIO TO HI-FI Output

These jacks provide variable audio output to a separate stereo amplifier. With this connection, the audio to the stereo can be controlled by the television's main volume.

#### ٥ VIDEO (MONO) VIDEO 0 0 0 Pb (MONO) Pb (MONO) (MONO) 0 00 0 0 0 **o o**

## MONITOR OUT

These jacks provide fixed audio and video signals for recording. Use the S-VIDEO Output for high-quality video output. NOTE: S-VIDEO Output may be used for recording only when the input is of S-VIDEO

## Audio/Video Inputs 1, 2, 3, and 4

S-VIDEO Inputs 1 and 2

with S-VIDEO output capability.

AV 1 and AV 2 provide S-VIDEO (Super Video) jacks for connecting equipment

> The SOURCE button or your remote will step through each video source and antenna source input each time it is pressed. Use the audio and video inputs to connect accessory devices—VCRs, camcorders, laserdisc players, DVD players and the like. (If you have mono sound, insert the audio cable into the left audio jack.) NOTE: You may use VIDEO or S-VIDEO inputs to connect AV 1 and AV 2, but only one of these inputs may be used at a time.